



National Library of Medicine PubMed

PubMed

Nucleotide

Protein

Genome

Structure

PubMed

Search PubMed for

Limits

Index

History

Clipboard

About Entrez

Display Abstract

Save

Print

Clipboard

Entrez PubMed

Overview
Help | FAQ

PubMed Services

Journal Browser
MeSH Browser
Single Citation Matcher
Batch Citation Matcher
Clinical Queries
Old PubMed

Related Resources

Order Documents
Grateful Med
Consumer Health
Clinical Alerts1 : *Anim Genet* 2000 Feb;31(1):8-12

Related Articles. Books. LinkOut

Construction and evaluation of a porcine bacterial artificial chromosome library.

Suzuki K, Asakawa S, Iida M, Shimanuki S, Fujishima N, Hiraiwa H, Murakami Y, Shimizu N, Yasue H

Second Research Division, STAFF Institute, Ibaraki, Japan.

A porcine bacterial artificial chromosome (BAC) library consisting of 103,488 clones has been constructed. The average insert size in the BAC vector was calculated to be 133 kb based on the examination of 189 randomly selected clones, indicating that the library contained 4.4 genome equivalents. The library can be screened by two-step PCR. The first screening step is performed on 22 superpools, each containing 4704 clones (49 x 96 well plates). In the second screening step, 49 plates comprising a superpool are arrayed in a 7 x 7 matrix and 4D-PCR is performed. Screening of the library superpools by PCR for 125 marker sequences selected from different regions of swine genome revealed 123 sequences, indicating that the library is not biased. Subsequent screenings (4D-PCR) were successfully applied for identification of clones containing each marker sequence. This porcine BAC library and the PCR screening system are useful for isolation of genomic DNA fragments containing desired sequences.

PMID: 10690355, UI: 20154945

Abstract

Revised: January 10, 2000.

Disclaimer | Write to the Help Desk
NCBI | NLM | NIH